

What is claimed is:

1. A method of displaying an accounting state for a communication service by a terminal device, comprising steps of:

5 receiving a communication service, to which a plurality of accounting methods can be applied, from a network and providing the communication service for a subscriber; and

10 displaying accounting quantities corresponding to each of said plurality of accounting methods in the process of utilizing the communication service.

2. A method of displaying an accounting state for a communication service by a terminal device according to claim 1, further comprising steps of:

15 obtaining a piece of information on an accounting degree corresponding to each of said plurality of accounting methods from said network when the communication service starts being utilized; and

20 measuring, in the process of utilizing the communication service, an quantity of an accounting element corresponding to each of said accounting methods, calculating and displaying said accounting quantities corresponding to each of said accounting methods on the basis of the measured result and the accounting degree information.

25 3. A method of displaying an accounting state for a communication service by a terminal device according to claim

1, further comprising a step of displaying a specified accounting quantity by a display mode that the specified accounting quantity can be distinguished from other accounting quantities.

5           4. A method of displaying an accounting state for a communication service by a terminal device according to claim 1, further comprising a step of displaying sums corresponding to each of said accounting methods together with said accounting quantities.

10           5. A method of displaying an accounting state for a communication service by a terminal device according to claim 2, further comprising a step of outputting an alarm, when the quantity of the accounting element corresponding to at least  
15 one accounting method reaches a predetermined threshold value.

20           6. A method of displaying an accounting state for a communication service by a terminal device according to claim 1, further comprising a step of outputting an alarm, when at least one accounting quantity reaches a predetermined threshold value.

25           7. A method of displaying an accounting state for a communication service by a terminal device according to claim 1, further comprising a step of notifying said network of pieces of information on a specified accounting method selected by the subscriber from said plurality of accounting methods after

finishing the communication service so that said specified accounting method is applied to the use of the communication service.

5           8. An accounting system for a communication service,  
comprising:

providing means for providing a communication service,  
to which a plurality of accounting methods can be applied, with  
a terminal device of a subscriber, through a network; and

10        recording means for receiving, from the terminal device,  
information indicating an accounting method selected by the  
subscriber, and recording the information on a database in order  
to issue an accounting ticket according to the selected  
accounting method.

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9. An accounting system for a communication service according to claim 8, wherein said providing means provides the subscriber with communication services of a plurality of categories; and

20           said recoding means receives, from the terminal device,  
at least one information indicating at least one accounting  
method corresponding to at least one category selected by the  
subscriber, and records the information on the database in order  
to issue an accounting ticket according to the selected  
25   accounting method corresponding to the category of the  
communication service utilized by the subscriber.

10. An accounting system for a communication service,  
comprising:

means for providing a communication service, to which a  
plurality of accounting methods can be applied, with a terminal  
5 device of a subscriber, through a network; and

means for receiving, when the subscriber utilizes the  
communication service, at least one information indicates an  
accounting method, selected by the subscriber, that is applied  
to the communication service this time, from the terminal device  
10 in order to issue an accounting ticket according to the selected  
accounting method regarding the use of the communication service  
this time.

11. An accounting system for a communication service,  
15 comprising:

means for providing a communication service, to which a  
plurality of accounting methods can be applied, with a terminal  
device of a subscriber, through a network;

a database for storing communication records of the  
20 communication service whenever the subscriber utilizes the  
communication service;

means for receiving, from the terminal device, at least  
one information indicating at least one accounting method  
selected from the plurality of accounting methods and a specific  
25 information indicating at least one communication record as a  
settlement target;

means for acquiring the settlement target corresponding

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to the specific information from said database;

means for calculating at least one accounting quantity corresponding to the acquired settling target regarding at least one accounting method which is indicated by the recorded

5 accounting method information;

means for giving the calculated accounting quantity/quantities to the terminal device, the terminal device informing the subscriber of the accounting quantity/quantities from the giving means; and

10 means for receiving, from the terminal device, an  
information indicating an accounting method is applied to the  
settlement target selected by the subscriber, in order to issue  
an accounting ticket regarding the settlement target.

15            12. An accounting system for a communication service,  
comprising:

means for providing a communication service to which a plurality of accounting methods can be applied with a terminal device of a subscriber, through a network;

20           a database for storing communication records of the  
communication service whenever the subscriber utilizes the  
communication service;

means for recoding a settling method information obtained from the terminal device, the settling method information including any of the accounting methods and a settling period 25 information selected by the subscriber;

means for acquiring, whenever the settling period

progresses, based on the settling period information, at least one communication record during the settling period as a settling target from the database;

means for calculating an accounting quantity

5 corresponding to the acquired settling target based on the  
accounting method information; and

means for giving the calculated accounting quantity to the terminal device.

10            13. An accounting system for a communication service,  
             comprising:

means for providing a communication service to which a plurality of accounting methods can be applied with a terminal device of a subscriber, through a network;

15           a database for storing communication records of the  
communication service whenever the subscriber utilizes the  
communication service, the database is used in order to acquire  
at least one communication record as a settling target selected  
by the subscriber;

20 means for receiving, from the terminal device, the settling target acquired from the database and information indicating at least one accounting method that should be applied to the settling target;

means for calculating at least one accounting quantity  
25 corresponding to the settling target on the basis of at least  
one accounting method indicated by the information from the  
terminal device; and

means for giving said at least one accounting quantity to the terminal device, the terminal device displaying the given accounting quantity in order to make the subscriber select an accounting method applied to the settling target.

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14. An accounting system for a communication service, comprising:

means for providing a communication service to which a plurality of accounting methods can be applied with a terminal device of a subscriber, through a network;

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a database for storing communication records of the communication service whenever the subscriber utilizes the communication service; and

means for providing at least one settling program with the terminal device, the terminal device acquiring at least one communication record as a settling target from the database, calculating at least one accounting quantity with regard to at least one accounting method selected from the plurality of accounting methods by operating the settling program, and displaying at least one accounting quantity calculated.

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15. A terminal device operated by a subscriber when utilizing a communication service in a network, comprising:

means for transmitting to said network a call setting message in which a quality of service (QoS) corresponding to a communication condition selected by the subscriber is set; and

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means for displaying, after receiving a QoS of a call actually connected based on the QoS set in the call setting message, information indicating a communication condition based on the QoS corresponding to the above communication condition, and  
5 information indicating a communication condition based on the QoS received from said network.

16. A terminal device comprising:

means for acquiring from the network a communication  
10 service to which a plurality of accounting methods can be applied, and providing the communication service with a subscriber; and

means for displaying an accounting quantity corresponding to each of said plurality of accounting methods in the process of utilizing the communication service.

17. A terminal device according to claim 16, further comprising:

means for obtaining a piece of information on an accounting degree corresponding to each of said plurality of accounting  
20 methods from said network when the communication service starts being utilized; and

means for measuring, in the process of utilizing the communication service, an quantity of an accounting element corresponding to each of said accounting methods, calculating  
25 and displaying said accounting quantities corresponding to each of said accounting methods on the basis of the measured result and the accounting degree information.



18. A terminal device according to claim 16, further comprising: means for displaying a specified accounting quantity by a display mode that the specified accounting quantity can be distinguished from other accounting quantities.

19. A terminal device according to claim 16, further comprising: means for displaying sums corresponding to each of said accounting methods together with said accounting quantities.

20. A terminal device according to claim 17, further comprising: means for outputting an alarm, when the quantity of the accounting element corresponding to at least one accounting method reaches a predetermined threshold value.

21. A terminal device according to claim 17, further comprising: means for outputting an alarm, when at least one accounting quantity reaches a predetermined threshold value.

22. A terminal device according to claim 16, further comprising: means for notifying said network of pieces of information on a specified accounting method selected by the subscriber from said plurality of accounting methods after finishing the communication service so that said specified accounting method is applied to the use of the communication service.

23. A terminal device comprising:

means for acquiring from a network a communication service  
to which a plurality of accounting methods can be applied, and  
5 providing the communication service with a subscriber;

means for recording communication records on a database  
whenever the subscriber utilizes the communication service;

means for obtaining at least one communication target as  
a settling target selected by the subscriber; and

10 means for transmitting a settlement request including the  
settling target obtained from the database and at least one  
accounting method that should be applied to the settling target,  
the subscriber selecting at least one accounting method from  
the plurality of accounting methods.

24. A terminal device comprising:

means for acquiring from a network a communication service  
to which a plurality of accounting methods can be applied, and  
providing the communication service with a subscriber;

20 means for recording communication records on a database  
whenever the subscriber utilizes the communication service;

means for receiving from the network at least one settling  
program corresponding to at least one accounting method selected  
from the plurality of accounting methods by the subscriber;

25 means for acquiring, from the database, at least one  
communication record as a settling target selected by the  
subscriber;

means for calculating, by operating the settling program,  
an accounting quantity corresponding to the settling target with  
regard to at least one accounting method selected by the  
subscriber; and

5 means for displaying at least one accounting method  
calculated.

Table 1. Demographic characteristics of the study population	
Age (years)	65.5 ± 1.2
Gender	
Male	50.0
Female	50.0
Education (years)	12.5 ± 0.5
Income (USD/month)	1,200 ± 100
Marital status	
Married	60.0
Single	40.0
Health status	
Good	70.0
Poor	30.0
Smoking status	
Smoker	30.0
Non-smoker	70.0
Alcohol consumption	
Drinker	20.0
Non-drinker	80.0
Comorbidities	
Hypertension	45.0
Diabetes	35.0
Cholesterol	55.0
Arthritis	40.0
Depression	25.0
Medication use	
Yes	65.0
No	35.0
Quality of life (SF-36)	50.0 ± 10.0
Physical function	45.0 ± 12.0
Role limitation	40.0 ± 15.0
Bodily pain	55.0 ± 10.0
General health	50.0 ± 12.0
Energy/fatigue	45.0 ± 10.0
Social functioning	40.0 ± 15.0
Emotional well-being	55.0 ± 10.0
Healthcare utilization	
Primary care	60.0
Specialty care	40.0
Hospitalization	20.0
Emergency department	10.0
Long-term care	5.0